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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,588	07/31/2003	YUI-SHIN FRAN	10382-US-PA	1587
31561	7590	09/21/2005	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE			ROY, SIKHA	
7 FLOOR-1, NO. 100				
ROOSEVELT ROAD, SECTION 2			ART UNIT	
TAIPEI, 100			PAPER NUMBER	
TAIWAN			2879	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

18

<b>Office Action Summary</b>	<b>Application No.</b> 10/604,588	<b>Applicant(s)</b> FRAN ET AL.	
	<b>Examiner</b> Sikha Roy	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/5/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

The Amendment, filed on July 5, 2005 has been entered and is acknowledged by the Examiner.

Cancellation of claims 12-22 and new claim 23 have been entered.

### ***Specification***

The abstract of the disclosure is objected to because of the proper language.

The form and legal phraseology often used in patent claims, such as "means", "comprises" and "said," should be avoided.

Correction is required. See MPEP § 608.01(b).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). In claim 1 the limitation of 'identical outer wall' lacks proper antecedent basis. The specification discloses (section [0030]) outer walls consisting of dielectric substrate 200a and plate 200b but there is no mention of identical outer wall.

Appropriate correction of the following is required.

### ***Claim Objections***

Claim 1 objected to because of the following informalities:

The recitation of 'a plurality of electrodes disposed only on an identical outer wall' is not clear. For continuing examination purpose 'plurality of electrodes disposed only on one of two identical outer walls' is considered.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5 –7 are rejected under 35 U.S.C. 102(e) as being anticipated by U.s. Patent 6,744,195 to Park.

Regarding claim 1 Park discloses (Fig. 5 column 5 lines 24-30, column 6 lines 8-26) a flat lamp structure comprising a gas discharge chamber (discharge region), a fluorescence substance 49 disposed on an inner wall of the gas discharge chamber, a discharge gas disposed in the gas discharge chamber and a plurality of electrodes 43,43a disposed only on one of identical outer walls of the discharge chamber.

Regarding claims 5 and 6 Park discloses the discharge gas is Xe gas.

Regarding claim 7 Park discloses (column 6 lines 65,66) the electrodes include metal.

Claims 1-6 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,762,556 to Winsor.

Regarding claim 1 Winsor discloses (Fig. 1 column 3 lines 31-62 column 6 lines 60-65) a flat lamp comprising a gas discharge chamber having discharge gas inside, fluorescent substance (34 in Fig. 5) disposed on the inner wall of the discharge chamber and plurality of electrodes 22,24 disposed on the outer wall of the chamber. Furthermore Winsor discloses (column 4 lines 33-38) both electrodes disposed on the one outer wall (same surface ) in a coplanar arrangement.

Regarding claim 2 Winsor discloses (Fig. 1) the discharge chamber comprises a dielectric substrate 14, a plate 16 disposed on the upper portion of the substrate, a plurality of strips 18 (sidewalls) disposed between the dielectric substrate and the plate, plate being connected to the edge of the substrate.

Regarding claim 3 Winsor discloses (column 5 lines 53-56) the thickness of the bottom dielectric substrate is 1mm or less.

Regarding claim 4 Winsor discloses (column 6 lines 5-10) the distance between the dielectric substrate and the plate (height of the sidewall) is .51 mm.

Regarding claims 5 and 6 Winsor discloses (column 3 lines 38-42) the discharge gas is inert gas including one of Xe, Ar.

Regarding claim 23 Winsor discloses all the limitations which are same as of claim 2 and also spacers 20 distributed between the plates 14 and 16 to support the plates and thereby minimizing the danger of implosion due to external atmospheric pressure. (Fig. 1 column 3 lines 52-57).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7,8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,762,556 to Winsor, and further in view of U.S. Patent 6,034,470 to Vollkommer et al.

Regarding claim 7 Winsor does not exemplify the electrodes being metal electrodes.

Vollkommer in analogous art of flat fluorescent lamp discloses (column 6 lines 15-18) the electrodes consisting of a metal such as silver. Vollkommer further discloses electrodes made of silver with high current carrying capacity can be constructed as a relatively narrow strip and formation of cracks can be avoided.

Art Unit: 2879

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use electrodes of the lamp of Winsor made of metal as suggested by Vollkommer for providing strip electrodes with high current carrying capacity without formation of cracks.

Regarding claim 8 Vollkommer discloses (column 11 lines 53-56) electrodes made of silver.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,762,556 to Winsor, and further in view of U.S. Patent 5,319,282 to Winsor ('282).

Regarding claim 9 Winsor is silent about a carrier substrate disposed beneath the dielectric substrate to carry the gas discharge chamber.

Winsor ('282) in the same field of endeavor discloses (Fig. 5 column 9 lines 54-60, column 10 lines 1-42) a flat lamp having a carrier substrate (planar substrate) 68 disposed on the plate 65 of the lamp creating a second chamber. The pressure in the second chamber being intermediate between the atmospheric pressure and the low pressure inside the discharge chamber places less stress on the planar plate 65 of the lamp. Winsor('282) further discloses this configuration permits thinner plates to be used in the lamp 10 without danger of imploding and thus enhancing intensity of light emitted from the lamp.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to provide a carrier substrate disposed on the dielectric substrate of the flat



Art Unit: 2879

lamp of Winsor as taught by Winsor('282) creating a second chamber which results in less stress on the dielectric substrate of the lamp and thus permitting use of thinner plate without danger of imploding.

Regarding the recitation of 'carrier substrate disposed beneath the dielectric substrate' the examiner notes that 'beneath' is a relative term and if light is emitting from the top plate of the flat lamp of Kuroda, then the carrier substrate disposed on the dielectric substrate can be interpreted as disposed beneath the bottom dielectric substrate.

Regarding claim 10 Winsor('282) discloses (column 13 lines 19-31 Fig. 5) the carrier substrate and the dielectric substrate are connected (bonded) by disposing adhesive on the side walls 70 and 72.

Regarding claim 11 Winsor('282) discloses adhesive includes glasses, UV epoxy resins or other suitable adhesive for permanently bonding the glass structures.

### ***Response to Arguments***

Applicant's arguments with respect to claim1 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument regarding claims 9-11 that the references fail to show certain features of applicant's invention, it is noted that the feature upon which applicant relies i.e., carrier substrate is directly attached to the dielectric substrate so that the dielectric substrate and the carrier substrate can be considered as a single



Art Unit: 2879

plate is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

Art Unit: 2879

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.R.

Sikha Roy  
Patent Examiner  
Art Unit 2879

*Karabi Guharay*  
**KARABI GUHARAY**  
**PRIMARY EXAMINER**